

LISTING OF CLAIMS

Claims 1-27 (Cancelled).

28. (Currently Amended) A method of operating a motor of a pump for use with at least one of a pool and a spa, the method comprising:

measuring an AC line current;

determining whether the AC line current is greater than a programmed threshold ~~causing a jamming fault condition~~ due to a foreign object obstruction in at least one of the pool and the spa;

automatically reducing at least one of an output voltage provided to the motor and an operating frequency of the motor if the AC line current is ~~less~~ greater than the programmed threshold in order to drive the motor in a limp mode in an attempt to clear ~~the jamming fault condition and~~ the foreign object obstruction; and

automatically shutting down the motor within up to about 30 seconds if the motor does not operate within operational limits while being driven in the limp mode ~~and the jamming fault condition~~ and the foreign object obstruction cannot be cleared.

Claims 29-31 (Cancelled).

Claims 32-86 (Cancelled).

87. (Currently Amended) A method of operating a motor of a pump for use with at least one of a pool and a spa, the method comprising:

measuring a parameter including at least one of an actual pressure, a bus current, a bus voltage, a line current, a temperature of a heat sink, and a speed of the motor;

determining if the parameter is outside of a range of programmed thresholds ~~causing a jamming fault condition~~ due to a foreign object obstruction in at least one of the pool and the spa;

executing ~~[[a]]~~ an automatic recovery operation if the parameter is outside of ~~[[a]]~~ the range of programmed thresholds in an attempt to clear ~~the jamming fault condition~~ and the foreign object obstruction, the automatic recovery operation including at least one of generating an updated speed control command, driving the motor in a limp mode, shutting down the motor for up to about 30 seconds and then restarting the motor, and operating the motor in a reverse direction for up to about 30 seconds and then operating the motor in a forward direction; and

automatically shutting down the motor within up to about 30 seconds if the recovery operation fails ~~and the jamming fault condition~~ and the foreign object obstruction cannot be cleared.